

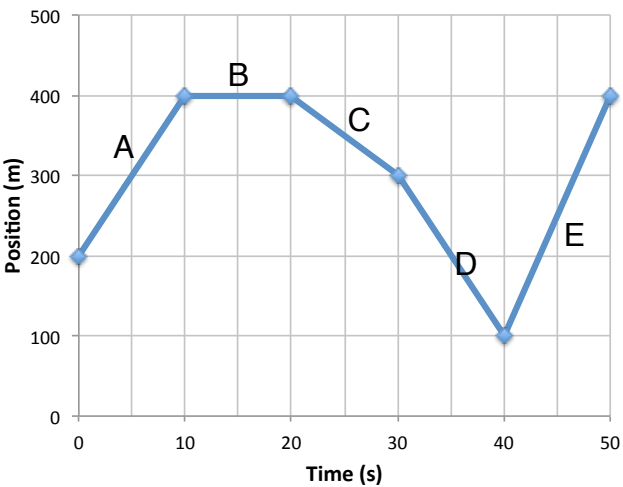
Newton’s 1st Law & Resulting Motion WS 7

Use the position vs. time graph of a dog walking down a street to answer the following questions.

1. What is the velocity of the dog for each 10 second time interval?

A: _____ D: _____
B: _____ E: _____
C: _____

2. Determine the average velocity of the dog by finding the average of the five interval velocities found in question 1.



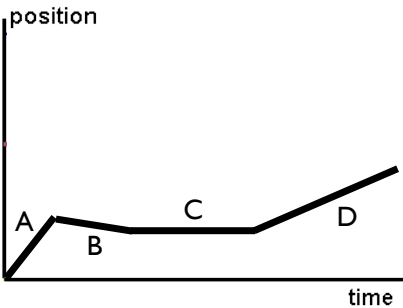
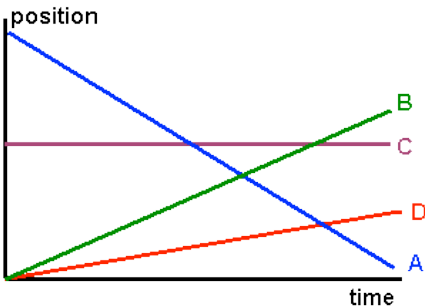
3. What is the displacement of the dog? Show all work. Draw the displacement of the dog on the graph above.

| GIVEN VARIABLES | EQUATION | WORK / PICTURE | ANSWER |
|-----------------|----------|----------------|--------|
| | | | |

4. What is the average velocity of the dog? Determine velocity by using displacement dog walked.

| GIVEN VARIABLES | EQUATION | WORK / PICTURE | ANSWER |
|-----------------|----------|----------------|--------|
| | | | |

5. For each graph, circle the fastest positive velocity and box the fastest negative velocity.



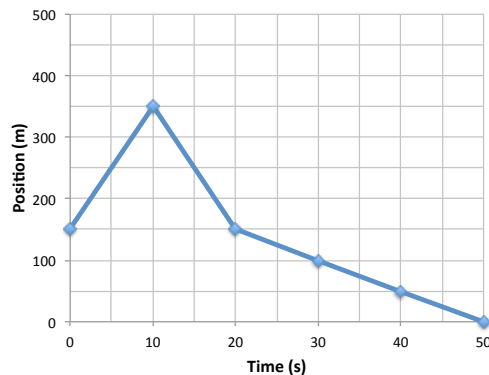
6. For each graph pictured on the back page,

- a. find the VELOCITY of each 10 second interval
- b. determine the average velocity by averaging interval velocities
- c. determine displacement traveled and draw displacement on graph.
- d. determine average velocity by displacement traveled.

PHYSICAL SCIENCE

Name: _____

DSHS
Mrs. Ellis



0-10s: _____

10-20s: _____

20-30s: _____

30-40s: _____

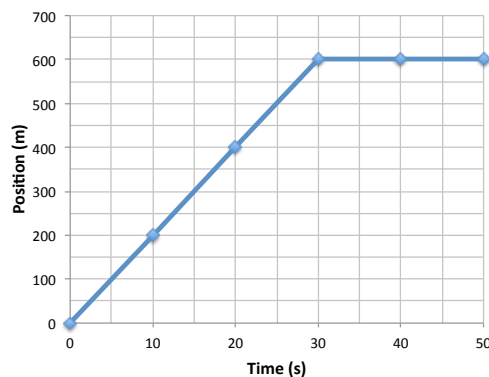
40-50s: _____

Avg: _____

Displacement: _____

Avg Velocity: _____

| GIVEN VARIABLES | EQUATION | WORK / PICTURE | ANSWER |
|-----------------|----------|----------------|--------|
| | | | |



0-10s: _____

10-20s: _____

20-30s: _____

30-40s: _____

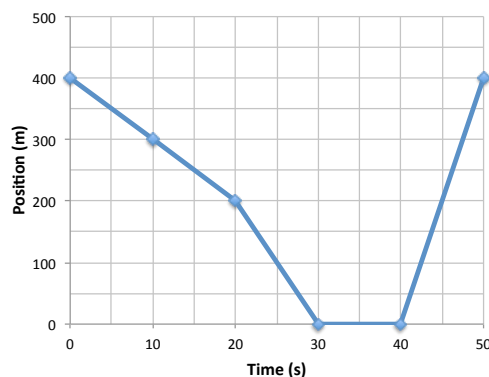
40-50s: _____

Avg: _____

Displacement: _____

Avg Velocity: _____

| GIVEN VARIABLES | EQUATION | WORK / PICTURE | ANSWER |
|-----------------|----------|----------------|--------|
| | | | |



0-10s: _____

10-20s: _____

20-30s: _____

30-40s: _____

40-50s: _____

Avg: _____

Displacement: _____

Avg Velocity: _____

| GIVEN VARIABLES | EQUATION | WORK / PICTURE | ANSWER |
|-----------------|----------|----------------|--------|
| | | | |